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DRAFT TECHNICAL REPORT NO. 8

PHASE 2 STAGE 2C

SELECTION OF PREFERRED SITE

# ARCHAEOLOGICAL ASSESSMENT

## MUSEUM OF INDIAN ARCHAEOLOGY (LONDON)

URBAN DOCUMENTATION CENTRE
RESEARCH UNIT FOR URBAN STUDIES
McMASTER UNIVERSITY
HAMILTON, ONTARIO

HALTON

ENVIRONMENTAL ASSESSMENT
LANDFILL COMPONENT OF
SOLID WASTE MANAGEMENT

JANUARY 1985

## TABLE OF CONTENTS


| Section | | Page |
|---|---|---|
| | SUMMARY | i |
| 1.0 | INTRODUCTION | 1-1 |
| 2.0 | FIELDWORK | 2-1 |
| 3.0 | RESULTS | 3-1 |
| 3.1 | Candidate Site A<br>3.1.1 Discussion | 3-1 |
| 3.2 | Candidate Site B<br>3.2.1 Discussion | 3-7 |
| 3.3 | Candidate Site C<br>3.3.1 Discussion | 3-8 |
| 3.4 | Candidate Site D<br>3.4.1 Previously Registered Archaeological Sites<br>3.4.2 Newly Registered Archaeological Sites | 3-10 |
| 3.5 | Candidate Site E<br>3.5.1 Previously Registered Archaeological Sites<br>3.5.2 Newly Registered Archaeological Sites | 3-19 |
| 3.6 | Candidate Site F | 3-23 |
| 4.0 | CANDIDATE SITE EVALUATION | 4-1 |
| 5.0 | CONCLUSIONS | 5-1 |



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## TABLE OF CONTENTS (Continued)


| | Following Page |
|---|---|
| LIST OF ILLUSTRATIONS | |
| Figure | |
| 1. Candidate Site A - Area Surveyed | 3-1 |
| 2. Candidate Site B - Area Surveyed | 3-7 |
| 3. Candidate Site C - Area Surveyed | 3-8 |
| 4. Candidate Site D - Area Surveyed | 3-10 |
| 5. Candidate Site E - Area Surveyed | 3-19 |
| 6. Candidate Site F - Area Surveyed | 3-22 |
| LIST OF TABLES | |
| Table | |
| 1. Outline Chart of Ontario Prehistory | 1-3 |
| 2. Summary Data | 3-23 |
| APPENDICES | |
| Appendix | |
| A. Glossary of Terms | |
| B. References Cited | |

**SUMMARY**

Candidate Site D is clearly the richest of the six candidate sites in terms of known archaeological resources, as evidenced by our documentation of 12 archaeological sites and findspots within the area. Artifacts from all cultural periods of Ontario's prehistory have been found within Site D, demonstrating sporadic but repeated human occupation of the area throughout the past 11,000 years. One significant site, AiGx-46, has been documented and there is abundant evidence to suggest that additional significant sites may exist in the vicinity.

On the basis of the results of the present study it is not possible to differentiate between the archaeological significance of Candidate Sites A, C and E. Each of these areas has produced a small number of sites of limited significance and there is a substantial amount of high potential land yet to be surveyed within each area. The discovery of small sites clearly establishes the presence of aboriginal peoples within these areas in prehistoric times and raises the possibility that sites of greater significance may exist within the unsurveyed areas.

A single findspot within Candidate Site B represents the only evidence of prehistoric occupation of that candidate site. It has received the second lowest ranking in terms of archaeological significance; however, it must be noted that only 10 % of the area was available for survey. Some unsurveyed high potential land does exist within this candidate site.

Candidate Site F has received the lowest ranking, largely on the basis of negative evidence. Although we were unable to survey any land within Site F, the heavily disturbed southern portion of the area must be considered to have low archaeological potential. Less disturbed areas of the candidate site further to the north can be expected to hold greater potential.

Specific and smaller tracts of land within each candidate site were defined as Site Plan Areas, as required in the original terms of reference for Stage 2C. The ranking of the Site Plan Areas is as follows:

| Candidate Site | Ranking |
|---|---|
| D | 6 |
| A | 3 |
| C | 3 |
| E | 3 |
| B | 2 |
| F | 1 |

## 1.0 INTRODUCTION

In the fall of 1982 the Museum of Indian Archaeology (London) prepared a background study on the archaeological resources within the Region of Halton for the firm of Walker, Wright, Young Associates Limited, Toronto (Pearce 1982). The purpose of this study was to provide essential archaeological data to be considered in the selection of candidate areas for the location of the landfill component of the Region of Halton's Solid Waste Management System.

Archaeological resources include both prehistoric and historic sites. The prehistoric era encompasses a series of periods dating from the time of the initial occupation of southern Ontario by native aboriginal peoples circa 9000 B.C. to the time of the first sustained contact between native aboriginal peoples and European explorers and missionaries, circa A.D. 1500-1550 (see Table 1). The historic era encompasses the time from this first native aboriginal/European contact to the present, but for archaeological purposes sites are generally not considered to be "historic" unless they are at least one hundred years old. Historic sites are not confined to those occupied by Europeans or the first generation of non-aboriginals born and raised in the area now defined as southern Ontario, for there is a long history of aboriginal settlement and land use from after A.D. 1500-1550 to the present day.

Native aboriginal archaeological sites may range from a single artifact to a large village, and are defined on the basis of any evidence demonstrating that an area or a specific location was utilized for any purpose. Typical native aboriginal archaeological sites include the following: a single artifact, such as a flake of chert (flint) removed from a large nodule by man; a single arrowhead; a cluster of chert (flint) flakes; a camp where chert cores were reduced by removal of flakes that were subseqently made into bifaces, arrowheads, and other chert artifacts; a lithic quarry where chert cores were extracted from bedrock outcrops; a fishing camp; a hunting camp; an agricultural village, hamlet, cabin or camp; or a burial site. Generally, single artifact locations are referred to as "findspots", while

multiple artifact locations are called "sites". Camp sites are generally less than 0.5 hectare in size, while villages are less than 2.0 hectares in size. It is important to register archaeological findspots as sites since they indicate the prehistoric use of a specific area and since a re-investigation of that area may result in the recovery of additional artifacts.

Historic archaeological sites may also range from a single artifact to a large village or town. Typical historic archaeological sites include the following: residences, farms, stores, post offices, mills, blacksmith shops, schools, churches, gas or water wells, railways and railway stations, midens (garbage dumps), or any other structure or activity area deemed to be historically significant. Historic sites may include structures standing today, the ruins of such structures, or concentrations of historic material such as china, glass, or crockery fragments in locations where historic structures once stood. For archaeological purposes, historic sites are generally, but not always, ones where no structure remains standing.

The Ontario Heritage Act (1975) requires that all archaeological researchers be licensed by the Ministry of Citizenship and Culture, that all archaeological sites discovered be documented by virtue of a "site record form" filed with that Ministry and assigned a discrete archaeological site number (in the form of AjGw-42, AkGv-1, etc.), and that all research be documented in a report filed with that Ministry.

A total of 415 archaeological sites and findspots spanning the 11,000 year prehistory of Ontario (see Table 1) were documented within Halton Region during the background research phase of the project. Although the locational characteristics of these sites varied somewhat in each cultural period, the majority of prehistoric sites were found to occur on well-drained soils in proximity to running water (Pearce 1982:7).

Recommendations for additional archaeological study during subsequent phases of the site selection process included a proposal to conduct a

thorough field survey of those areas selected as potential landfill locations. A re-investigation of all known archaeological sites within potential landfill locations was also recommended. Subsequent to the selection of six candidate sites for the proposed landfill, the second phase of the archaeological resource assessment was initiated. The results of this fieldwork are summarized in the present report.

Table 1: Outline Chart of Ontario Prehistory

| Period | Group | Time Range | Comment |
|---|---|---|---|
| PALAEO-INDIAN | Fluted<br>Hi-Lo | 9000 - 7500 B.C. | Big game hunters; small, nomadic groups |
| ARCHAIC | | | |
| Early | --- | 7500 - 5500 B.C. | Nomadic hunters and gatherers |
| Middle | --- | 5500 - 4000 B.C. | |
| Late | Inverhuron<br>Laurentian | 4000 - 1000 B.C. | Polished stone tools |
| Transitional | Glacial Kame<br>Broadpoint | 2000 - 1000 B.C. | Burial ceremonialism |
| WOODLAND | | | |
| INITIAL | | | |
| Early | Meadowood<br>Red Ochre | 1000 - 300 B.C. | Introduction of pottery |
| Middle | Saugeen<br>Western Basin | A.D. 300 - 500 | |
| TRANSITIONAL | Princess Point<br>Riviere au Vase | A.D. 500 - 800 | Introduction of village life and agriculture |
| TERMINAL | | | |
| Early | Glen Meyer;<br>Pickering<br>Younge | A.D. 800 - 1300 | |
| Middle | Middleport | A.D. 1300 - 1400 | Large palisaded villages |
| Late | Neutral; Huron | A.D. 1400 - 1550 | |
| HISTORIC | Neutral; Huron;<br>Mississauga | A.D. 1550 - 1650 | Contact between Natives and Europeans |
| | British; French | A.D. 1550 - present | |

## 2.0 FIELDWORK

Archaeological survey was carried out on Candidate Sites A, B, C, D and E during the months of June and July, 1984.

This phase of the archaeological assessment was limited to:

1. surface survey of agricultural fields with adequate surface visibility (i.e. ploughed fields or those planted in open crops such as corn, beans, or young grain), and

2. assessment of known archaeological sites on surveyable land within the candidate sites.

The archaeological survey encompassed all available lands within the boundaries of the Candidate Sites as initially defined by the Study Team. At a later stage in Stage 2C, specific tracts of land within each Candidate Site would be identified as "Site Plan Areas". It is therefore important to note that the archaeological fieldwork took place on the entire Candidate Sites, not just the "Site Plan Areas".

Woodlots, pasture land and fields with dense crop cover cannot be adequately assessed through surface survey and these areas were not investigated during this phase of fieldwork. Consequently, the amount of surveyable land varied significantly among the six candidate sites. Table 2 summarizes the area surveyed within each of the candidate sites. It should be noted that no fieldwork was conducted on Site F since there was no surveyable land within this candidate site (i.e., there were no ploughed fields or fields planted in open crop).

Fields were surveyed by walking in transects at ten metre intervals, examining the ground surface for artifacts or other cultural debris indicative of human occupation. Each time an artifact was found, the surrounding area was intensively surveyed at two metre intervals to determine if additional material was present. This procedure allowed definition of the

approximate limits of the archaeological and historic sites discovered on the basis of the distribution of cultural material. These artifact distributions were mapped and the precise site locations were plotted on aerial photographs while in the field.

The current policy of the Ministry of Citizenship and Culture is to keep specific locational data on known archaeological sites confidential, to protect those heritage resources in the interest of heritage conservation. Therefore published copies of this report omit all specific locational data on known archaeological sites. These data include the name of the archaeological site, which is often the name of the landowner, and the site location (county, township, lot, concession, and military grid reference). Published copies of this report contain only site number, cultural affiliation, and site type, while unpublished copies of a version of this report on file with the Ministry of Citizenship and Culture contain that information plus site name and location. In all other respects, the two versions of this report are identical. The Ministry of Citizenship and Culture versions of this report are available at 77 Bloor Street West, 2nd Floor, Toronto, Ontario, M7A 2R9, and 55 Centre Street, London, Ontario, N6J 1T4. These versions are subject to that Ministry's "Archaeological Sites Data Base Access Guidelines". These guidelines state that requests for access to data must be made in writing, include the reasons for the request, and indicate the intended use of the data that is requested. Such requests are examined by the Ministry on an individual case basis, and access to data is subject to Ministry discretion. The decision of the Ministry to release data is in the interest of heritage conservation, and they request that information released be neither published nor made available to the general public. Information may be withheld by the Ministry if, in the opinion of Ministry staff, the release of that information would unduly endanger an archaeological resource. A Ministry decision to withhold information may be appealed to the Minister of Citizenship and Culture.

The following section of this report describes the archaeological sites and findspots located in the course of the survey.

## 3.0 RESULTS

A total of 23 archaeological sites and findspots were discovered during the survey. Twenty of these have been registered with the Archaeology Unit, Heritage Branch, Ministry of Citizenship and Culture. Three of the sites located yielded very small collections of fragmentary historic material. These were not registered. In addition, three previously registered archaeological sites were re-investigated in an attempt to assess their significance, and three other previously registered sites were noted but could not be investigated due to crop cover.

### 3.1 Candidate Site A

A total of 84 hectares of agricultural land were surveyed within Candidate Site A (see Figure 1). These investigations resulted in the discovery and registration of four previously undocumented archaeological sites described below.

AjGw-41

A single spokeshave scraper was found on the V. Fox farm in a cultivated field north of Burnhamthorpe Road. This findspot occurs on a low knoll located near a small pond. This pond is seasonally dry. The site is also in proximity to two intermittent creeks.

An intensive search of the area around the findspot produced no additional material. The scraper is made on a large flake of greyish-white mottled chert, possibly Onondaga chert. The concave working edge of this tool extends for 28 mm along one lateral edge. As this lone artifact is undiagnostic, no inferences regarding the cultural affiliation or age of this site can be made.

Although no additional material was found in the immediate area, Mr. A. Fish, who owns the adjacent farm to the west, informed the author that he had found at least six projectile points in a field on his property. At

the time that the survey was conducted this field was planted in hay and was therefore unsurveyable. It is possible, however, that a significant prehistoric site is located in this area, and AjGw-41 may be related to this site.

AjGw-42

Occurring in a large field in the northwest corner of Candidate Site A, Aj Gw-42 is represented by a single biface fragment. The terrain in the area is gently rolling, with the nearest water source being a small intermittent tributary of Joshua's Creek located to the west.

At the time that the site was found the field was planted in young corn and although survey conditions were good, close examination of the area revealed no additional cultural material. The single specimen is a finely worked biface tip made of dark grey Onondaga chert. It is too fragmentary to allow identification of its cultural affiliation or an estimate of its age. As a single isolated find it probably represents a projectile point lost during the hunt.

AjGw-43

AjGw-43 is represented by a single large utilized flake of Onondaga chert, found in the same large corn field that AjGw-42 is located in. It occurs on gently rolling terrain in the northeastern corner of the field. A small intermittent tributary of Joshua's Creek lies to the south. This creek was dry at the time that the site was discovered.

The single artifact recovered is a large flake of Onondaga chert that displays a series of small flake scars along its distal end, indicative of utilization as a scraping tool. Although survey conditions were good, no other material was found in the area.

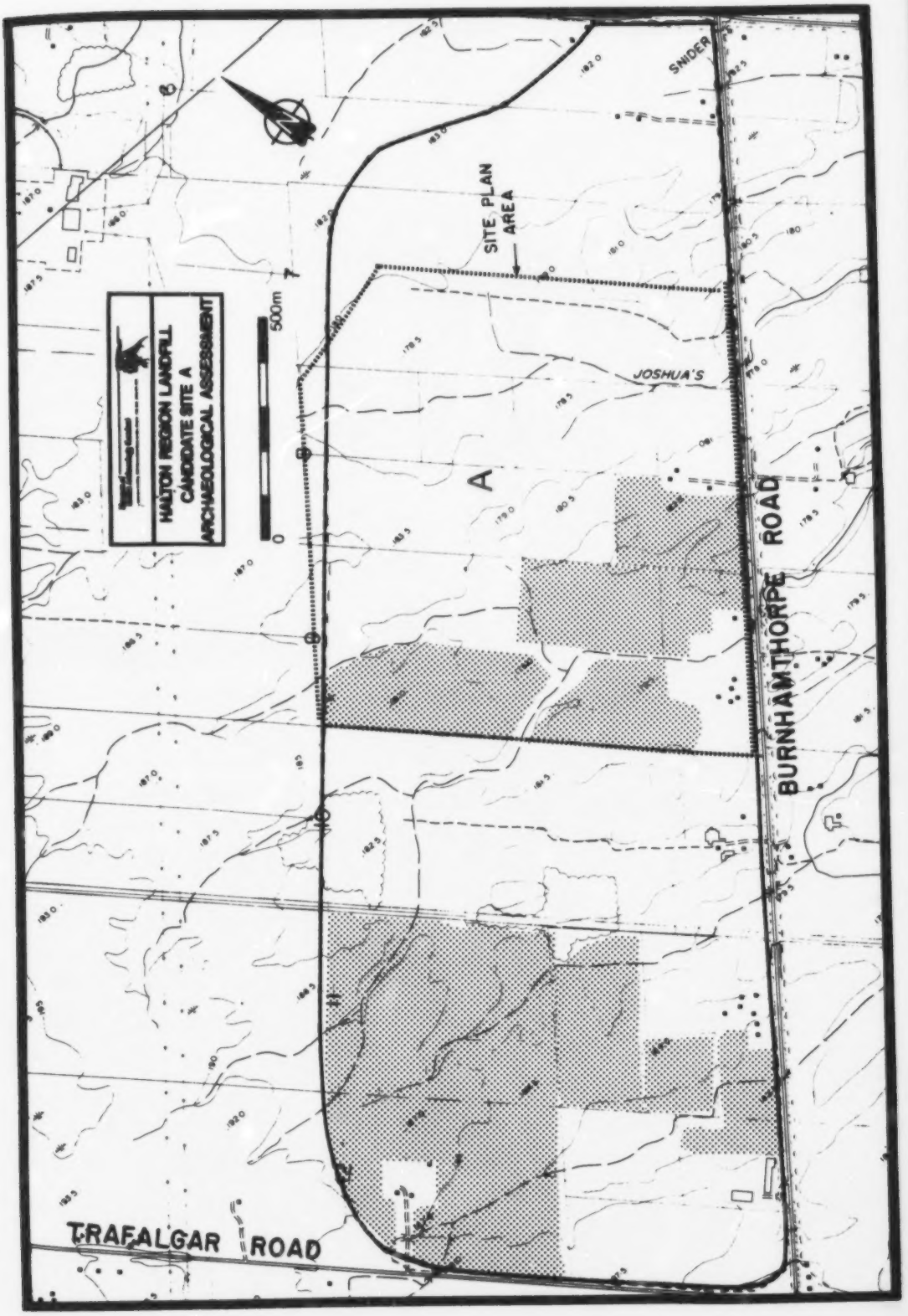


Figure 1: Candidate Site A -
Area Surveyed

AjGw-44 Fish Homestead

AjGw-44 is an historic site located on the farm of Mr. Arnold Fish north of Burnhamthorpe Road on Lot 9, Concession II, Trafalgar Township. We were informed of this site by Mr. Fish, who told us that the farm had been in his family since it was deeded from the Crown in 1804. According to Mr. Fish, the first structure built on the property was a log cabin located immediately west of the present Fish home. Shortly after this cabin was built, a second house was erected some distance to the north along the Eighth Line, which forms the western boundary of the Fish property. Until the early 1900s a cordoroy road apparently existed on the Eighth Line. The second structure, originally located on this road, was the focus of our investigations.

The remains of the Fish homestead are located in a grove of chestnut, locust and lilac trees adjacent to the Eighth Line. The entire area is now overgrown in weeds and small trees, thus surface visibility was poor. The site was briefly investigated by excavating a number of test pits to determine if any structural features remained intact and to locate any associated refuse deposits.

A poorly defined depression, tentatively identified as the remains of a basement, was located 16 metres east of the existing fenceline along the western edge of the property. A test pit excavated in the bottom of this depression yielded only a single square cut nail, a few pieces of plaster and a small rectangular piece of flagstone. A number of large flat stones, possibly remnants of a foundation, were noted around the perimeter of this depression. However, this line of stones is not continuous and it would appear that much of the foundation is no longer intact. The basement depression measures approximately 6 m by 4 m.

A 1.5 m by 1 m test unit was excavated two metres southwest of the basement depression. An irregular layer of flagstone and a single red brick were uncovered in this area, at depths varying from 5cm to 20cm in the topsoil.

These stones, which appear to have been shifted by frost action, may have formed part of a walkway at the front of the house.

Two transects of test pits, measuring approximately 30 cm square and placed at 5 metre intervals, were excavated to the north and east of the basement depression. The eastern transect was more productive, as these test pits yielded cut nails, bone and glass fragments. However, artifact concentrations indicative of a kitchen midden (dump) were not located.

East of the basement depression, a deep hole representing the remains of either a well or cistern was located. Four test pits excavated in this area produced fragments of red earthenware crockery and a portion of a metal pot.

The total artifact inventory from the Fish homestead includes 11 cut nails, 11 pieces of crockery, 3 fragments of a metal pot, 2 pieces of bottle glass, 3 fragments of plaster, 1 piece of flagstone and 12 fragments of animal bone. The lack of historic ceramic remains is unusual and inhibits any attempt to assign a precise date to the site.

According to Mr. Fish, three generations of his family were born in this house. Although the construction date of the structure is not known, on the basis of the information provided by Mr. Fish it is likely that the house was occupied from circa A.D. 1810 until the turn of the century. Further archaeological and archival research would undoubtedly bracket the period of occupation more precisely.

The Fish Homestead (AjGw-44) has the potential to yield some interesting information pertaining to 19th century rural life in the area. Should Candidate Site A be considered in subsequent phases of the site selection process, additional archaeological and archival research would be warranted to further document this site.

Unregistered Historic Sites in Candidate Site A.

Two clusters of historic artifactual remains and one historic structure were documented during the present survey but not registered for various reasons. The first was a scatter of historic ceramic and glass fragments found interspersed with 20th century materials (i.e. metal, rubber) in a large field bounded on the west by Trafalgar Road. No structural remains were found and, given the presence of 20th century material, it was decided that registration of the site was not warranted. It has been assigned field number HR-A-8.

A second small concentration of historic material (HR-A-3) was recovered from a cultivated field adjacent to Burnhamthorpe Road. The collection from this site includes one scalloped-edged piece of blue transfer-printed ware, one fragment of blue transfer ware, a plain, clear-glazed white rim fragment and a white clay pipe stem. Scalloped-edged wares are most common on sites dating prior to A.D. 1850, however, a definite date cannot be assigned to this site on the basis of the small ceramic collection. It has not been registered due to its small size and lack of intact structural remains.

The final unregistered historic site documented within Candidate Site A is the Marshall home on Burnhamthorpe Road, known as the Marfield House. According to Mrs. Marshall, the Marfield House was built in 1820 and was owned by Mr. George Marlatt. An addition was built on the home in 1847. The Marshalls have apparently located a midden associated with the house, however, it has been disturbed by amateur excavation and was not investigated. The fact that the house has been continuously occupied since the 19th century lessens its archaeological potential, since we would anticipate considerable admixture of 19th and 20th century materials in any archaeological deposits. Nonetheless, the Marfield House represents one of the prominent historical features of this candidate site.

### 3.1.1 Discussion

Although no significant prehistoric sites were discovered within Candidate Site A during the present study, it should be noted that our investigations were primarily confined to the western portion of the candidate site. Most of the land in the eastern half of the area was not surveyed as it was either in pasture or under dense crop cover. However, there has been some previous archaeological work in this area.

In 1981 the Museum of Indian Archaeology conducted an archaeological assessment of a TransCanada Pipeline corridor which cross-cuts the eastern portion of Candidate Site A from Burnhamthorpe Road to a point just west of the Ontario Hydro Trafalgar Transformer Station (Pihl 1981a). No archaeological sites were found in the segment of the corridor within Site A; however, this corridor was only 20 metres wide and thus represents only a narrow transect of surveyed land through the candidate site.

In 1980 and 1981 the Museum of Indian Archaeology conducted an archaeological assessment of the proposed Highway 403 corridor which borders the northern boundary of Candidate Site A (Pihl 1981b). Four archaeological sites and findspots were located in the segment of the corridor between Trafalgar Road and Ninth Line. These include two isolated finds of prehistoric lithic artifacts (AjGw-29 and AjGw-32), one scatter of 19th century historic material (AjGw-33), and one 19th century foundation with associated features and occupational debris ( AjGw-34) (Pihl 1981b). Further archaeological investigations were recommended only for the historic site with intact structural features (AjGw-34)(Pihl 1981b:17). Thus the findings of this assessment parallelled those of the present study in that evidence of prehistoric occupation was extremely limited while historic remains were deemed to hold greater archaeological potential.

Although only minor prehistoric sites have been discovered in and around Candidate Site A in the research conducted to date, the discovery of these sites raises the possibility that significant prehistoric camps may yet be found within the candidate site. Consequently, a thorough archaeological

survey of the remaining unsurveyed land would be recommended in the event that this site is chosen for the location of the proposed landfill facility.

## 3.2 Candidate Site B

Most of the land within Candidate Site B was either in pasture, woodlot, or planted in crops with poor surface visibility at the time of the survey. As a result, only 29 hectares of land within this candidate site were available for survey. Figure 2 shows the area surveyed. These investigations resulted in the discovery of one small archaeological site described below.

AiGw-179

A single flake of Onondaga chert was recovered from a cultivated field west of Trafalgar Road. The findspot is located along the western edge of the field adjacent to a stagnant pond. The topography of the area is relatively flat and the nearest source of running water is an intermittent creek located to the east.

An intensive search of the surrounding area yielded no additional material.

### 3.2.1 Discussion

Although only a single findspot was located in Candidate Site B, these results should not be viewed as an accurate measure of the archaeological potential of the area. As noted above, only 29 hectares were available for survey within this candidate site. This represents only about 10% of the total area. Morrison Creek cross-cuts the southern portion of the candidate site diagonally, and there is no reason to believe that archaeological sites would not be found along this creek just as they were found along similar creeks in Sites A and C. Accordingly, if Candidate Site B was chosen as the location for the proposed landfill facility, a thorough archaeological survey of the remaining area would be recommended.

## 3.3 Candidate Site C

Three previously unknown archaeological sites were discovered in the survey of 42 hectares of agricultural land in Candidate Site C. The majority of the surveyed land occurred in the southwest corner of the candidate site as shown on Figure 3. The three sites discovered are described below.

### AiGw-180

AiGw-180 is represented by a single chert scraping tool found in a large corn field adjacent to Trafalgar Road. The site is located on top of a prominent knoll in the northeastern portion of the field. The general topography of the area consists of gently rolling land with numerous low-lying wet areas. The nearest water source is an intermittent tributary of Morrison Creek that runs through a swale located to the north.

The single artifact is an ovate scraper made on a flake of Onondaga chert. The distal end of this flake has been retouched, creating a convex working edge extending up the lateral margins. Unfortunately, the cultural affiliation and age of this site cannot be determined as the lone artifact is undiagnostic. Although survey conditions were good no other material was located.

### AiGw-181

A small scatter of prehistoric cultural material was found in a corn field east of Trafalgar Road and north of Highway 5. A small, intermittent tributary of Morrison Creek runs through a swale across the northern end of the field. This is the nearest source of running water.

Artifact recoveries from AiGw-181 include one biface fragment made from an unidentified cream-coloured chert (possibly Flint Ridge Chalcedony), and two flakes of Onondaga chert, one of which shows evidence of utilization. All three finds were made within an area of about 200 square metres.

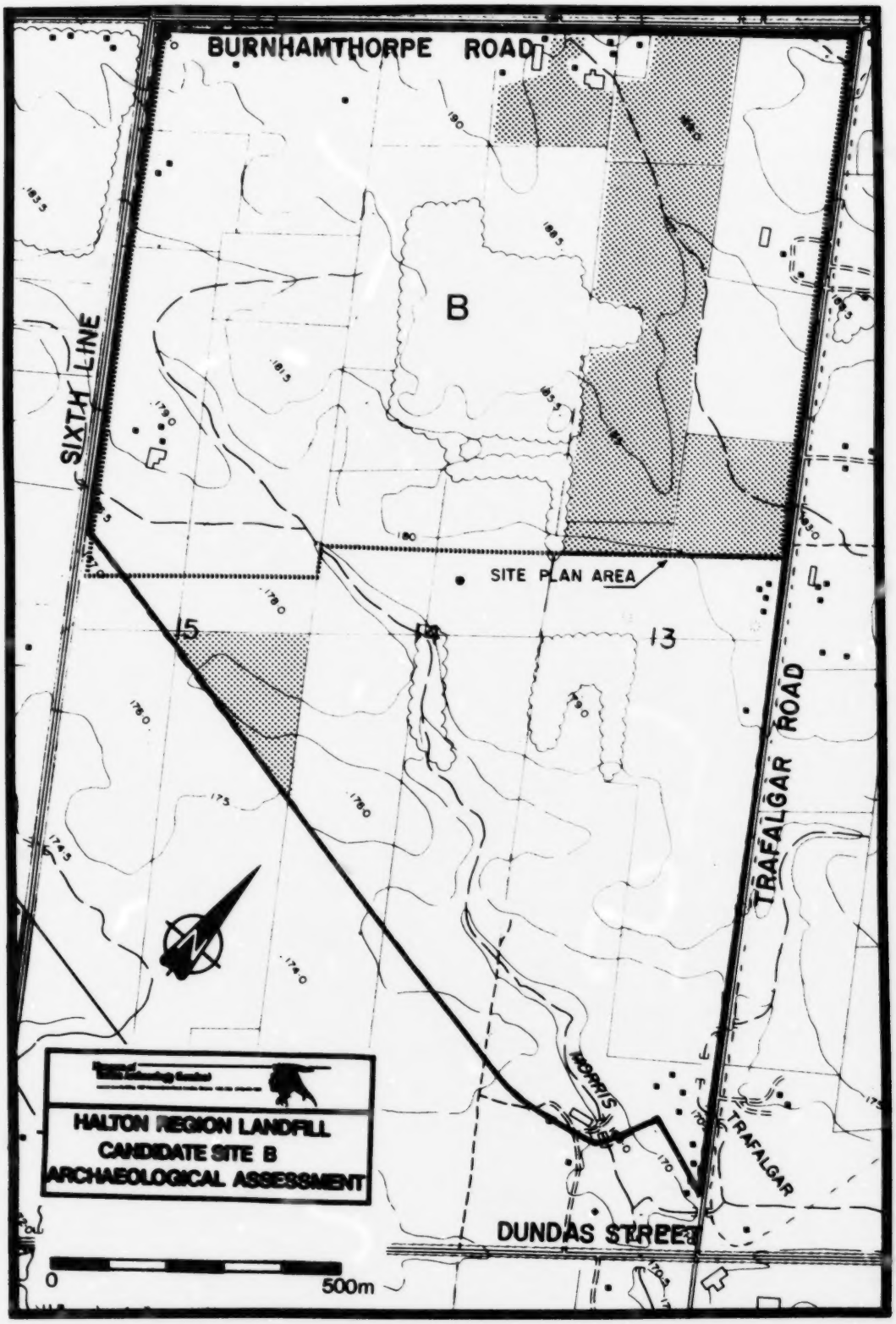


Figure 2: Candidate Site B -
Area Surveyed

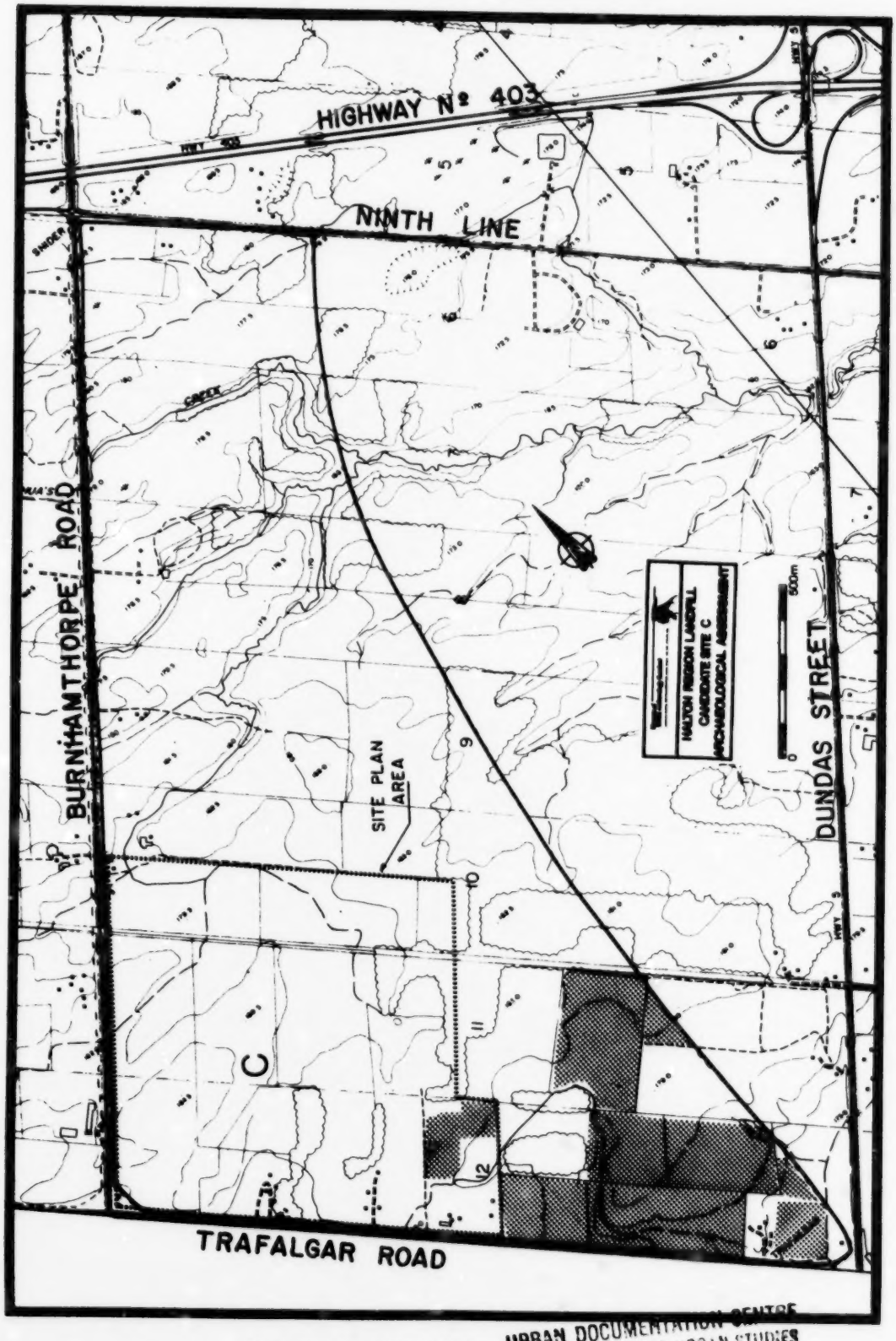


Figure 3: Candidate Site C

Area Surveyed

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Cultural debris indicative of sustained occupation was not recovered, despite careful survey of the area. The lack of diagnostic material precludes any estimate of the age of the site, nor is it possible to determine its cultural affiliation.

AiGw-182

A second small scatter of lithic debris was found in the same field as AiGw-181, described above. This site is located adjacent to an intermittent creek surrounded by a swale. Although the topography of the area is gently rolling, the site itself is situated on relatively low land.

The cultural material recovered forms a linear (east-west) distribution covering approximately 800 square metres. Recoveries included two chert cores and five pieces of chipping detritis, all of Onondaga chert. Again, the lack of diagnostic material does not permit identification of the cultural affiliation or age of this site.

### 3.3.1 Discussion

Although no significant archaeological sites were discovered within Candidate Site C, it should be noted that the entire northern portion of this area was not available for survey when the fieldwork was conducted. This area is cross-cut by the Joshua Creek drainage system and holds high potential for the discovery of additional archaeological sites.

Our only investigations in the northern portion of Candidate Site C involved documentation of a cluster of large stones located in a woodlot on the Rampen farm and an historic well, also located on Rampen-farmed land. According to local residents, the former feature was known as the "Indian Place" and the distribution of stones formed a circular pattern. Our investigations indicated that these stones were, in fact, randomly placed. Test pits excavated in the area yielded no prehistoric or historic material. In all probability, these stones were dragged out of the fields by horses during pioneer times.

The historic well, mentioned above, is located west of the Eight Line. It is about 1.25 metres in diameter, with stone lined walls. As the surrounding area was in tall wheat, it was not possible to survey the area intensively; however, one historic ceramic chert was noted. The Rampen family informed us that they find a few pieces of historic ceramics every time they plough around the well. Although no structural remains other than the well were apparent, it is likely that a structure was located in this area during pioneer times when there was a road on the Eighth Line. As it was not possible to obtain a surface collection from this site to aid in assessing its archaeological significance, it has not been registered.

The documentation of a number of small archaeological sites along minor creeks in the southwestern portion of Candidate Site C suggests that similar sites may be associated with the small creeks in the northern portion of the candidate site. Thus it would be necessary to conduct a thorough field survey of the remaining unsurveyed area in the event that Candidate Site C is chosen as the location for the sanitary landfill facility.

## 3.4 Candidate Site D

Within Candidate Site D a total of 126 hectares of agricultural land were surveyed (Figure 4) resulting in the discovery of ten previously unknown archaeological sites. Prior to the present study, previous archaeological research had documented two sites within this candidate site. These sites were registered by A. Roberts (1976) during an archaeological survey of the Burlington-Oakville area conducted in the mid-1970s. As part of the present study, we attempted to relocate these sites, but met with little success. Nonetheless, they are described below, followed by a description of the newly discovered sites located during our recent fieldwork.

### 3.4.1 Previously Documented Sites

Both of the previously registered sites within Candidate Site D are located on the Martin property, east of First Line Road. Mrs. Martin has compiled a substantial collection of Indian artifacts found on her property, and

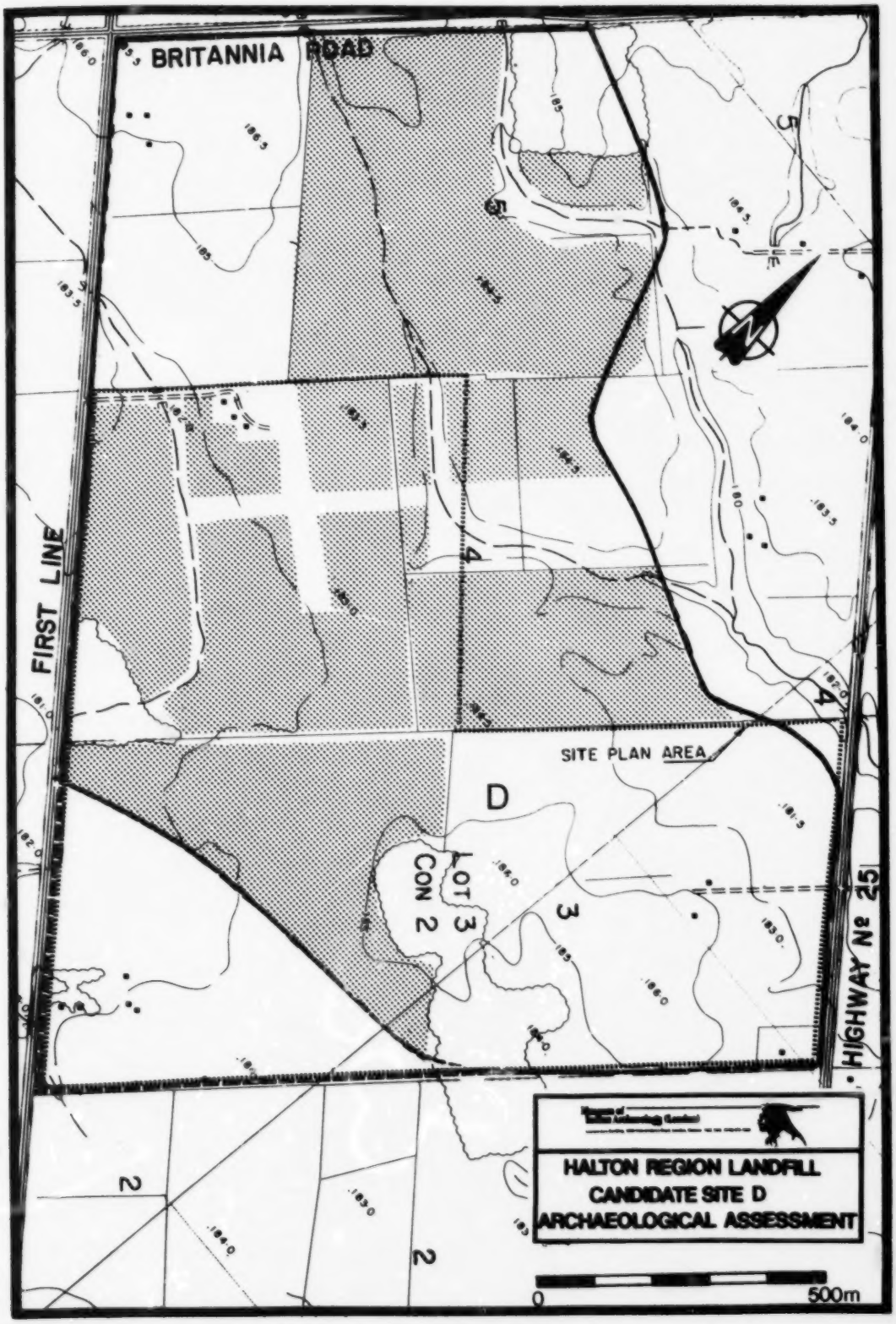


Figure 4: Candidate Site D -
Area Surveyed

Roberts (1976) registered the two sites on the basis of Mrs. Martin's description of where these artifacts were found. The following discussion of these sites is based on Roberts (1976) report and information provided by Mrs. Martin.

AiGx-45

AiGx-45 is a findspot of a single projectile point found by Mrs. Martin in a cultivated field immediately south of her home. The site is situated on fairly flat land near a small tributary of Bronte Creek.

Typologically, the point is an example of the Early Woodland Meadowood style dating circa 900 to 300 B.C. (see Table 1). During the present survey the area of the find was examined intensively but no additional occupational debris was recovered. However, survey conditions were highly variable, with surface visibility being poor in some areas. In any case, the present evidence indicates that AiGx-45 probably represents an isolated tool lost by an Early Woodland hunter.

AiGx-46

According to information provided by Mrs. Martin and Roberts (1976), AiGx-46 is a multi-component camp located west of the Martin home on both sides of their laneway. At the time of our survey a large portion of this site was in grass and could not be surveyed. However, the extreme southern portion of the site lies within a cultivated field which was examined with negative results. Yet again survey conditions were only fair due to crop growth.

AiGx-46 occurs on relatively flat land adjacent to a small Bronte Creek tributary. Artifacts found in the area by Mrs. Martin include a number of notched bifaces that are attributable to Late Archaic and Early Woodland occupations of the site (Roberts 1976:162), between 2500 B.C. and 300 B.C.

This site has been disturbed by a pipeline that was installed along its northern boundary. There may also have been some minor disturbance associated with the construction of the Martin laneway which bisects the site. Nonetheless, AiGx-46 would warrant further investigation in the event that Candidate Site D is selected as the location of the proposed landfill facility. Additional surface survey of the cultivated field under better survey conditions, combined with systematic test pitting along the northern side of the laneway, would allow better assessment of the archaeological potential of this site.

All of the diagnostic artifacts in the Martin collection were photographed in the field for the survey records. There are a number of artifacts in this collection which apparently were not found on either of the registered sites discussed above. These include a large side-notched projectile point of whitish chert (possibly Goat Island chert), two triangular bifaces of Onondaga chert which may relate to the Meadowood occupation of the area, a small projectile point, similar in form to the late Palaeo-Indian Hi-Lo style; and the base of a possible fluted point made from an unidentified cream-coloured lithic raw material. The latter two artifacts are indicative of a very early occupation of the area, as the Palaeo-Indian fluted and Hi-Lo point styles are estimated to date between 9000 and 7500 B.C. (see Table 1). Unfortunately, Mrs. Martin could not specifically identify the locations from which these artifacts were found, beyond stating that all had been found either on her property or on the adjacent property to the south. Most of this land was examined during the present survey and although no Palaeo-Indian sites were found, a number of small sites were located. These sites are among those described in the following section of this report.

Aside from the Martin collection, a second collection of artifacts from Candidate Site D is worthy of some discussion. These artifacts were found on the Tomosky property which is immediately east of the Martin land. According to Mrs. Tomosky, the majority of the artifacts in her collection were found in a field at the eastern end of her property. This field lies outside the boundaries of the candidate site and was, therefore, not

investigated. The westernmost portion of the Tomosky property falls within the candidate site. However, this field was in hay at the time of the survey and we were unable to examine it.

The Tomosky collection includes a number of small, stemmed projectile points that may relate to the Late Archaic occupation of the area; two Late Archaic Brewerton Corner-Notched points; a Middle Woodland Jack's Reef Corner-Notched point, and a number of untypable specimens. Many of these points are made of an unidentified coarse-grained raw material that is unlike any other lithic raw material encountered during the survey.

Although most of the Tomosky artifacts were apparently collected from an area just outside the candidate site, their presence increases the possibility that sites may exist on the unsurveyed western portion of the Tomosky property within the candidate site.

### 3.4.2 Newly Registered Sites

AiGw-133

A fragment of a large biface was found in the southeast corner of a large corn field bounded on the north by Britannia Road. The findspot location is west of a small intermittent tributary of Sixteen Mile Creek and is actually about 30 metres outside the boundary of the candidate site. The topography of the area is generally quite flat, although the terrain slopes downward slightly to the north and east and becomes more rolling on the opposite side of the creek.

The single artifact is an ovate biface of Onondaga chert that was broken across the mid-section. This tool is undiagnostic, yielding little information about its age or cultural affiliation. An intensive search of the surrounding area, conducted under good survey conditions, failed to produce additional material.

AiGw-184

AiGw-184 is represented by a single projectile point found along the southern boundary of the candidate site, in the southeast corner of a bean field bounded on the west by the First Line Road. It is situated on flat land with the nearest source of water being a seasonally dry tributary of Sixteen Mile Creek located to the east.

Typologically, the point is similar to some triangular early Late Woodland forms and can thus be dated circa A.D. 800-1300. It measures 35 mm in length, 26 mm in width, and 5.5 mm in thickness and both the lateral and basal edge configurations are slightly concave. The raw material is Onondaga chert.

As no additional material was found, AiGw-184 probably represents an isolated tool lost by a Woodland Indian during the hunt.

AiGw-185

A small scatter of lithic debris was located just east of a woodlot bounded on the west by First Line Road. The site is located on relatively flat land which slopes gently towards the north where an intermittent tributary of Bronte Creek flows.

The inventory from AiGw-185 includes two pieces of Onondaga chert debitage and one utilized flake of a whitish, coarse-grained raw material (probably Selkirk chert). No fire-cracked rock or other evidence of sustained occupation was observed.

The cultural affiliation of this site remains unknown, as the material recovered is undiagnostic.

AiGw-186

AiGw-186 is a findspot of a single artifact, centrally located in a large field east of First Line Road. It occurs on flat land southwest of a small tributary of Sixteen Mile Creek and east of a small creek in the Bronte drainage.

The lone artifact is a retouched flake of Onondaga chert, possibly utilized as a scraping tool. No other material was found and the retouched flake is, unfortunately, not diagnostic.

AiGx-95

A single utilized flake of Onondaga chert was recovered from the eastern end of a large corn field bounded on the north by Britannia Road. The findspot location is on fairly flat land adjacent to an intermittent creek which flows into Sixteen Mile Creek.

The single artifact is a long, blade-like flake of Onondaga chert that exhibits evidence of utilization along the entire length of one lateral edge. It is non-diagnostic and cannot be assigned a cultural affiliation.

AiGx-96

Located in a corn field south of Britannia Road, AiGx-96 is a single fragmentary projectile point findspot. The topography of the area is quite flat and the findspot is situated east of a seasonally dry tributary of Sixteen Mile Creek.

The projectile point is an elongated form with wide, shallow side-notches, convex lateral edges and a slightly concave "fishtail" base. It is made from Onondaga chert and has snapped off at the tip. The form of this point is most similar to the Orient Fishtail style, defined by Ritchie (1961:39) as a Late Archaic point type dating circa 1000 B.C. (see Table 1). As no

evidence of sustained occupation was discovered, it is likely that this lone artifact represents a tool lost during the hunt.

AiGx-97

AiGx-97 was located in the same large corn field as AiGx-95 and AiGx-96 discussed above. It is centrally located in this field, occurring on flat land just east of an intermittent creek that was dry at the time of our visit.

Three artifacts, all of them bifaces, were recovered from an area of approximately 900 square metres. Although the area was intensively surveyed at two metre intervals, no chipping detritis or other occupational debris was found.

The first biface is a small, stemmed projectile point of Onondaga chert. It is complete, measuring 48 mm in length, 28 mm wide at the shoulder, and is 10 mm thick. Both the lateral and basal edges are convex. The base (stem) has been thinned and tapers to a slight point. Typologically, this projectile point is most similar to the Adena point style, which is a characteristic Early Woodland form (Ritchie 1961:12), dating to the 400-1 B.C. time range (see Table 1).

The second artifact is an unfinished biface of Onondaga chert that appears to have been abandoned in the process of manufacture. It may represent an attempt to make an Adena point similar to the one described above, as the basal portion of this biface is similar to an Adena stem. Although the base has been thinned by secondary retouch, this retouch does not extend beyond the shoulder, thus the blade of the point has not been finished.

The final artifact is a crude triangular biface made on a large flake of Onondaga chert. It exhibits minimal retouch on the ventral surface and has broken at the base making it difficult to determine the nature of the hafting element. Two potlid flake scars on the dorsal surface indicate expo-

sure to high temperatures. The basal fracture may also have been heat induced. Lacking its base, this artifact is undiagnostic.

Given the close association of these three artifacts, the lack of chipping detritus or fire-cracked rock from AiGx-97 is quite unusual. The site probably represents a temporary camp occupied for a short term during the Early Woodland period. In the event that Candidate Site D is chosen in subsequent phases of the site selection process, additional surface survey of this site would be warranted to allow a better assessment of its archaeological potential.

AiGx-98

Located approximately 100 metres east of AiGx-97 in the same corn field, AiGx-98 is represented by a single find of a small biface fragment. The site is situated on flat land between two intermittent creeks.

The lone artifact is a fragmentary asymetrical biface of Onondaga chert. It is broken at the base and at the tip, but does not appear to have been finished since one lateral edge is very irregular. The small intact portion of the hafting element suggests that it may have been corner-notched; however, the specimen is too fragmentary to permit typological classification.

Although it was found within 100 metres of AiGx-97, this find has been registered as a separate site since the form of the biface is unlike those recovered at AiGx-97.

AiGx-99

A scatter of prehistoric cultural material was recovered from a small corn field, just south of a woodlot bounded on the north by Britannia Road. This site is situated on a knoll. The nearest source of water is a small tributary of Sixteen Mile Creek which flows south of the site. Both AiGx-95 and AiGw-183 are located along this same creek.

Cultural debris was found in an area covering approximately 800 square metres on top of the knoll. Recoveries include a single projectile point tip and three pieces of chipping detritus. The point is a finely worked specimen of Onondaga chert. It displays a lenticular cross-section, convex lateral edge configuration and has snapped across the mid-section. Lack of the base prohibits typological classification. The three flakes are all of Onondaga chert and do not show any evidence of utilization.

AiGx-100

A single find of a complete projectile point was made in a corn field east of First Line Road. The findspot occurs on flat terrain, east of an intermittent tributary of Bronte Creek.

The single specimen is a typical example of the Genesee point style and is made from Onondaga chert. The blade is broad and triangular in form with straight lateral edges, and the stem is straight-sided with a concave asymetrical base. Slight grinding is evident along the sides and base of the stem. This point is 75 mm long, 42 mm wide at the shoulder, 21 mm wide at the base, and 8 mm thick.

Genesee points date between 1900 and 1400 B.C. in southern Ontario. This isolated find probably represents a weapon lost by a Late Archaic hunter.

### 3.4.3 Discussion

The twelve sites and findspots now documented in Candidate Site D represent the highest concentration of prehistoric archaeological sites in any of the candidate sites. While this concentration, in part, reflects our more comprehensive coverage of this candidate site, it is also indicative of a more intensive prehistoric occupation. Artifacts from all major prehistoric cultural periods have been recovered, one significant archaeological site (AiGx-46) has been documented, and there is adequate evidence to indicate that aboriginal groups camped and hunted on this land sporadically from circa 9000 B.C. until historic times. Should Candidate Site D be

selected as the location for the proposed landfill facility, further archaeological investigation of all of these archaeological sites and an intensive archaeological survey of all remaining unsurveyed areas would be recommended. Archaeological site AiGx-46 is considered to be significant and should be avoided or mitigated if it were to be impacted by a landfill facility or other activity.

## 3.5 Candidate Site E

A total of 76 hectares of agricultural land were surveyed within Candidate Site E, resulting in the discovery of two small, previously undocumented archaeological sites. The area surveyed is shown in Figure 5. Prior to the initiation of this study previous archaeological research had documented four sites within the candidate site. Two of these were registered by A. Roberts (1976) during his archaeological survey of the Burlington-Oakville area. The other two were discovered by P. Storck of the Royal Ontario Museum, who surveyed three agricultural fields in the northwest corner of Candidate Site E during a 1971 survey of the Niagara Escarpment (Storck 1971). This area is also shown in Figure 5. The two sites found by Storck have not been registered with the Ministry of Citizenship and Culture. In the following section of this report the previously documented sites within Candidate Site E and the newly discovered ones will be discussed separately.

### 3.5.1 Previously Documented Sites

AiGx-59

AiGx-59 is located on the Stutt farm in a cultivated field on the west side of Tremaine Road. Roberts registered this site on the basis of reports of artifacts and lithic debris found in the general vicinity (Roberts 1976:41). According to Roberts, the Stutt family had found Early Archaic corner-notched projectile points in one of their fields, although the artifact collection had subsequently been lost. Although the precise site

location was not determined by Roberts, his locational data indicate that the artifacts were found at the eastern end of the farm.

During the present survey a total of 35 hectares were examined on the Stutt farm (see Figure 5). This fieldwork resulted in the discovery of two findspots, one located at the eastern end of the farm, the other located farther to the west. The easternmost find, a single chert flake, was in the general vicinity of AiGx-59 as documented by Roberts. It has, therefore, been treated as part of AiGx-59 and the locational data for the original registration of the site has been amended in the Ministry of Citizenship and Culture's site files.

We did not recover diagnostic artifacts to confirm Robert's designation of AiGx-59 as an Early Archaic site. However, since the entire eastern half of the Stutt farm was surveyed and the single findspot discovered represents the only evidence of an archaeological site in the general vicinity it was felt that the AiGx-59 Borden number should be used.

The AiGx-59 findspot is located on flat land in a cultivated field bounded on the east by Tremaine Road. The nearest source of running water is a small tributary of Bronte Creek located to the north.

The single flake of Onondaga chert recovered from AiGx-59 shows no evidence of utilization and is undiagnostic. Although Roberts' discussion of the site indicated that it might represent an Early Archaic camp, he did not physically survey the area in an attempt to locate the site. Our intensive survey of the area in question yielded only minimal evidence of prehistoric human occupation.

AiGx-61

This site, also registered by Roberts (1976), is located on the property adjacent to the Stutt farm on the south, in a field bounded on the east by Tremaine Road. At the time that the present survey was conducted this field was in pasture and it was not possible to investigate the area.

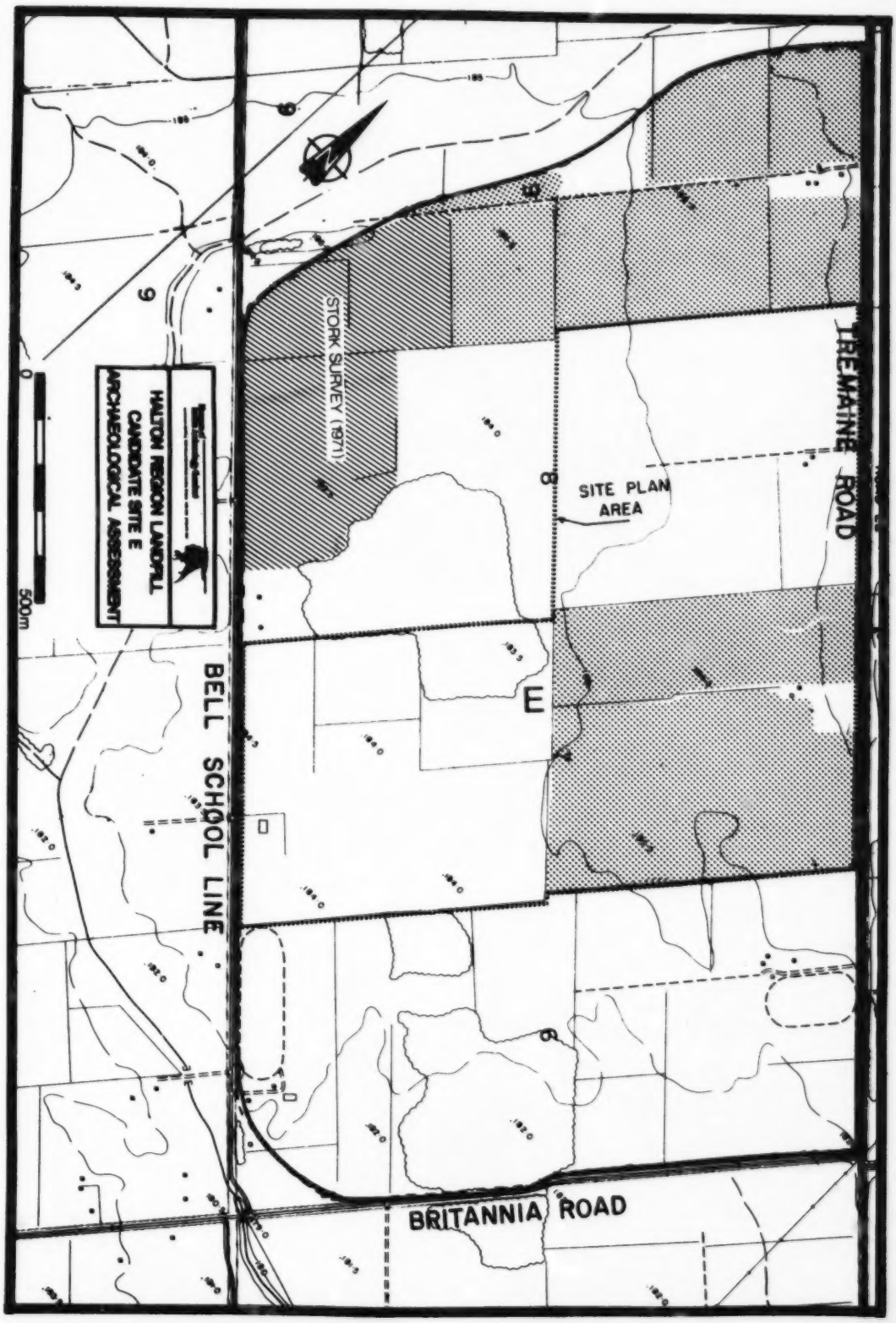


Figure 5: Candidate Site E -

Area Surveyed

Roberts did not recover any material from this site, nor did he pinpoint its location. The site was registered on the basis of reports of artifacts and lithic debris found in the general vicinity (Roberts 1976:42). As there is no information available concerning the type of artifacts found, it is not possible to comment upon the nature and significance of the site. Should Candidate Site E be chosen as the landfill location, further investigation in the vicinity would be necessary to pinpoint the location of AiGx-61 and determine its nature and extent.

ROM 11

ROM 11 is an unregistered findspot of a single utilized chert flake recovered during a survey conducted by the Royal Ontario Museum (Storck 1971). It is located in the northwest portion of the candidate site in a large field bounded on the west by Bell School Line. This field is presently in hay and was unsurveyable at the time of our fieldwork. Since the single utilized flake is an undiagnostic artifact it is not possible to assign an age or cultural affiliation to the site. ROM 11 should also be re-investigated if the Region of Halton chooses Candidate Site E as the landfill location.

ROM 18

Another unregistered site documented by the Royal Ontario Museum (Storck 1971), ROM 18 is located in a cultivated field just inside the northern boundary of the candidate site. At the time of the survey this field was in tall wheat and could not be investigated. Storck recovered five pieces of chert chipping detritus, one utilized flake, and one historic white clay pipe fragment from the site and has interpreted it as a Woodland camp. Additional investigation of ROM 18 will be necessary should this candidate site be chosen for the landfill facility.

### 3.5.2 Newly Discovered Sites

AiGx-101

This site is represented by a single chert flake recovered from a cultivated field bounded on the east by Tremaine Road. It occurs on flat land at a considerable distance from any water source. An intermittent tributary of Bronte Creek is located over 600 metres to the east.

The single find is a small flake of Onondaga chert showing no evidence of utilization. Intensive survey of the surrounding area under good survey conditions yielded no other occupational debris. The single flake is undiagnostic and there is no evidence of sustained occupation of this site.

AiGx-102

AiGx-102 is another isolated find, located in a cultivated field near the northern boundary of the candidate site. The findspot occurs on relatively flat terrain adjacent to a swale. A tributary of Bronte Creek located northwest of the site is the nearest source of running water.

The lone recovery is a single flake of Onondaga chert. It is undiagnostic and shows no evidence of utilization. No other cultural material was recovered despite good survey conditions.

### 3.5.3 Discussion

Previous archaeological research in Candidate Site E, combined with the present fieldwork, has resulted in the documentation of six small archaeological sites in the area. Two of these sites (AiGx-101 and AiGx-102) were discovered during the present survey and a third previously documented site (AiGx-59) was re-examined. Our investigations of these three sites to date have indicated that they do not present evidence for a sustained human occupation. However, a major tributary of Bronte Creek flows just outside the western boundary of the candidate site. At the time

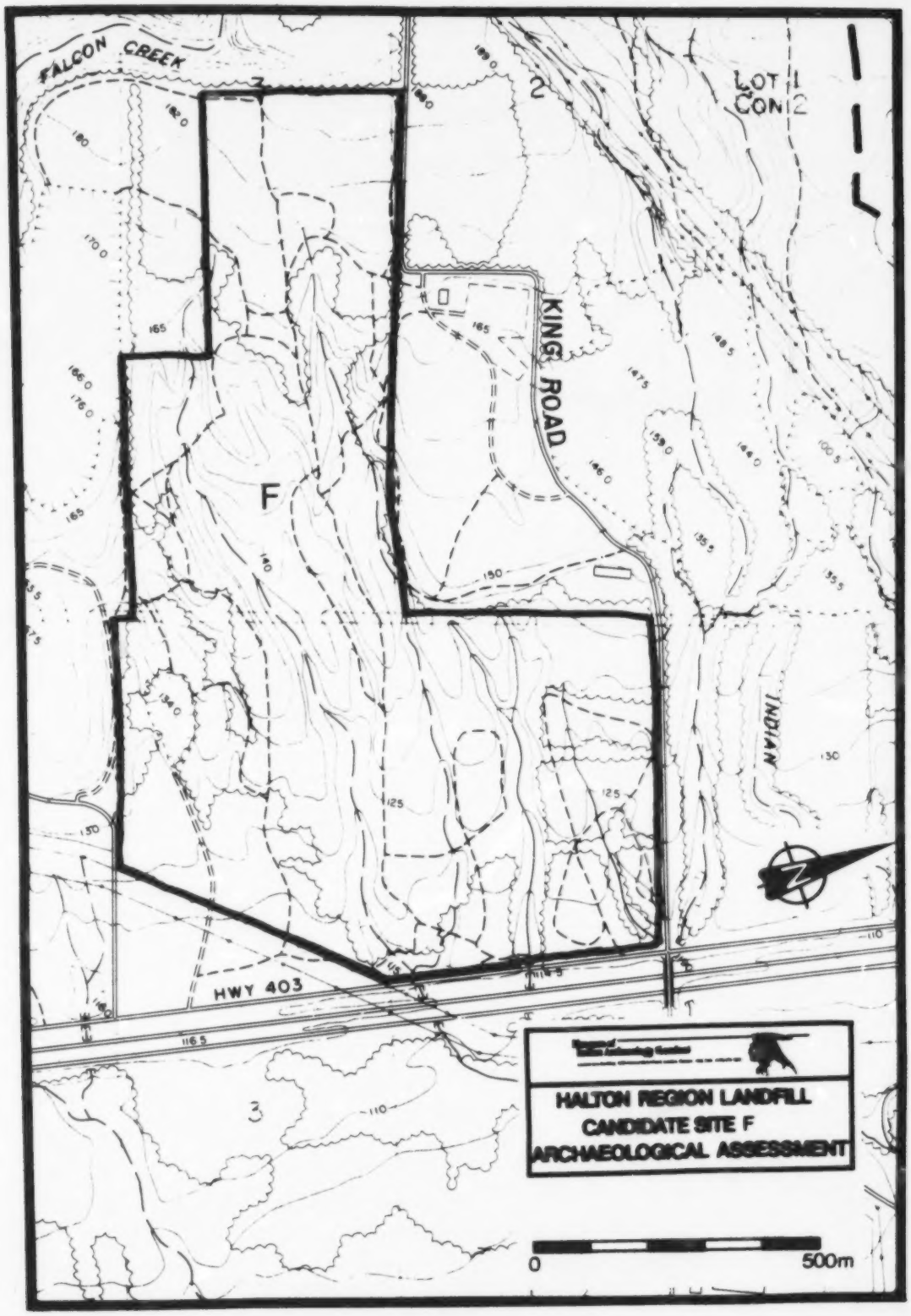


Figure 6: Candidate Site F

that the present survey was conducted it was not possible to examine any land in the western or southern portions of the candidate site. Storck's (1971) documentation of two sites in the northwestern portion of the candidate site, in proximity to the above mentioned creek, suggests that this area may hold higher archaeological potential. In the event that Candidate Site E is selected as the location for the landfill facility an intensive archaeological survey of the western and southern portions of the candidate site would be recommended.

## 3.6 Candidate Site F

At the time of the archaeological assessment there was no surveyable land available within Candidate Site F (shown in Figure 6). The southern portion of this candidate site is an area of gravel pits; some of these are now forested and cross-cut by several motorbike paths. This area has been extensively disturbed and has low archaeological potential as a result.

The northern portion of Candidate Site F consists of two large fields that were not being cultivated at the time of the survey. As they were grown up in grass and weeds it was not possible to conduct a surface survey. However, these fields must be considered to have good archaeological potential as they form part of a well-drained upland area in close proximity to Falcon Creek. If Candidate Site F was selected as the preferred location for the proposed landfill facility, it would be necessary to survey the northern portion of the area as well as any undisturbed areas of woodlot within the southern portion.

## 4.0 CANDIDATE SITE EVALUATION

Table 2 represents a summary of the data compiled in this study, including a preliminary ranking of the candidate sites on the basis of the estimated significance of their archaeological resources. Due to the variable coverage of the candidate sites in terms of our fieldwork and the extent of previous archaeological research, it is difficult to draw comparisons between candidate sites. However, the available data do suggest some significant differences in the relative archaeological potential of the candidate sites. These observations are discussed below.

Table 2: Halton Region Landfill Archaeological Assessment

Summary Data

| Candidate Site | Number of Archaeological Sites Documented | Area Surveyed (Hectares) (% of Total Area) | Ranking |
|---|---|---|---|
| A | 4 | 80 (33%) | 3 |
| B | 1 | 29 (10%) | 2 |
| C | 3 | 42 (12%) | 3 |
| D | 12* | 126 (73%) | 6 |
| E | 6** | 76 (28%)*** | 3 |
| F | 0 | 0 (00%)**** | 1 |
| Total | 26 sites | 357 ha. | |

* Includes two sites previously registered by Roberts (1976).

** Includes two sites previously registered by Roberts (1976) and two sites previously registered by Storck (1971).

*** Includes 24 hectares previously surveyed by Storck (1971).

**** No fieldwork was conducted on Site F since, at the time, there were no surveyable fields.

Candidate Site D is clearly the richest of the six candidate sites in terms of known archaeological resources, as evidenced by our documentation of 12 archaeological sites and findspots within the area. Artifacts from all cultural periods of Ontario's prehistory have been found within Site D, demonstrating sporadic but repeated human occupation of the area throughout the past 11,000 years. One significant site, AiGx-46, has been documented and there is abundant evidence to suggest that additional significant sites may exist in the vicinity.

On the basis of the results of the present study it is not possible to differentiate between the archaeological significance of Candidate Sites A, C and E. Each of these areas has produced a small number of sites of limited significance and there is a substantial amount of high potential land yet to be surveyed within each area. The discovery of small sites clearly establishes the presence of aboriginal peoples within these areas in prehistoric times and raises the possibility that sites of greater significance may exist within the unsurveyed areas.

A single findspot within Candidate Site B represents the only evidence of prehistoric occupation of that candidate site. It has received the second lowest ranking in terms of archaeological significance; however, it must be noted that only 10 % of the area was available for survey. Some unsurveyed high potential land does exist within this candidate site.

Candidate Site F has received the lowest ranking, largely on the basis of negative evidence. Although we were unable to survey any land within Site F, the heavily disturbed southern portion of the area must be considered to have low archaeological potential. Less disturbed areas of the candidate site further to the north can be expected to hold greater potential.

## 5.0 CONCLUSIONS

The analysis described in Section 4 encompassed all surveyable lands within the boundaries of units defined as candidate sites. Specific and smaller tracts of land within each candidate site were defined as Site Plan Areas, as required in the original terms of reference for Stage 2C. The Site Plan Areas are approximately 94 to 318 hectares (235 to 795 acres).

In the following list, only those archaeological sites occurring within the boundaries of the Site Plan Areas are listed.

A. Site Plan Area A

AjGx-41 single chert scraper

HR-A-3 unregistered historic site: 3 china fragments and a white clay pipe stem

Note: Both of these sites are located in the buffer zone around the proposed landfill site.

B. Site Plan Area B

AjGx-179 single chert flake

C. Site Plan Area C

None

D. Site Plan Area D

AiGx-45 Single arrowhead
(Meadowood type, Early Woodland period circa 900-300 B.C.)

AiGx-100 Single arrowhead
(Genesee type, Late Archaic period circa 1900-1400 B.C.)

AiGw-185 Two chert flakes and one utilized chert flake

AiGw-186 Single retouched chert flake, used as a scraper

AiGw-184 Single arrowhead
(Levanna type, early Late Woodland period circa A.D. 800-1300)

AiGx-46 Late Archaic/Early Woodland camp site (circa 2500-300 B.C.)

Note: The latter two sites, AiGw-184 and AiGx-46, are located in the buffer zone around the proposed landfill site. Site AiGx-46 is significant and requires avoidance or mitigation if affected by the landfill.

E. Site Plan Area E

AiGx-59 Early Archaic camp site (circa 7500-5000 B.C.)

Note: This site is located just northwest of the buffer zone around the proposed landfill site but probably extends into the buffer zone.

AiGx-61 Unconfirmed camp site of indeterminate cultural affiliation.

AiGx-101 Single chert flake.

Note: AiGx-101 is located in the buffer zone around the proposed landfill site.

F. Site Plan Area F

None (No archaeological survey was conducted on Site F)

The ranking shown in Table 2 remains the same.

It will be necessary, in the approvals stage, to conduct a more thorough archaeological assessment of the site selected as the preferred location of the landfill facility. This will include a re-investigation of all archaeological sites located to date within the preferred site and an archaeological survey of all lands not surveyed to date. The latter may necessitate test pitting large areas of bushlot and fields that are not cultivated or planted in an open crop (i.e., pasture, hay, grain fields).

All archaeological resources furnish data on the previous use of a given locality, but the significance of each archaeological site is variable and dependent upon a number of factors. As a result, each archaeological site must be evaluated on its own and in a larger context of what it potentially

informs us of the prehistory or history of an area. In any event, an archaeological site can be, if necessary, mitigated through excavation by a team of qualified archaeologists. Thus, the presence of a significant archaeological site does not prohibit the use of the area of its location for an activity such as landfilling, since there are options available for its "removal" by mitigative excavation prior to its destruction by an activity such as landfilling. It should be noted, however, that the mitigative excavation of a significant archaeological site could be quite costly, and a viable alternative to mitigative excavation is avoidance, whereby that archaeological site is left intact. It is possible to preserve an archaeological site by avoiding it completely, in which case its actual location is not affected in any way by future use. Theoretically, a landfill facility could "work around" a significant archaeological site by making it an undisturbed "island" within the landfill facility, but this is dependent upon its size and actual location in relation to the landfill facility.

Therefore, the presence of a significant archaeological site does not rule out the possibility that the area of its location could be used for an activity such as landfilling.

## APPENDIX A
## GLOSSARY OF TERMS

| | |
|---|---|
| AjGw-42 | Format of a unique registration number assigned to each archaeological site registered with the Ministry of Citizenship and Culture, also referred to as the "Borden" number (named after its inventor, Dr. Charles Borden). Each "Borden" block, defined by two upper case and two lower case letters, corresponds to a specific tract of land encompassing an area of 10 minutes latitude by 10 minutes longitude. Every archaeological site registered within that block is assigned a number, commencing with 1. AjGw-42 would therefore be the forty-second site found in block AjGw. |
| Arrowhead | (also referred to as a projectile point). Normally a chert artifact attached as the functional end of a spear or arrow. |
| Biface | Any chert artifact that has been modified on both the dorsal and ventral sides by removal of flakes through percussion or pressure. Bifaces frequently serve as preforms or blanks that were intended for further modification into projectile points or knives. |
| Chert | (also referred to as flint) A naturally-occurring sedimentary rock composed primarily of quartz (crystallized silica). Chert can be easily fractured and flaked by means of percussion or pressure, and was the primary material used by native aboriginals to make a variety of lithic artifacts including bifaces, projectile points, scrapers, and knives. Chert occurs in limestone and dolomite formations as nodules or bedded layers. |

| | |
|---|---|
| Chipping detritus | Term for the waste flakes generated from the reduction of a chert nodule into an artifact, or from the modification of an artifact (removal of small flakes), by means of percussion or pressure. |
| Core | The central portion of a nodule of chert remaining after flakes have been removed from its exterior. A nodule of chert occurs naturally, and a core may represent the portion of this nodule remaining after any number of flakes have been removed from it by man through percussion or pressure-flaking. |
| Debitage | Same as chipping detritus. |
| Findspot | Any locality where a single man-made artifact, or group of two or three related man-made artifacts, may be found. Findspots are distinguished from sites by their limited size and content. |
| Flake | A flake of chert removed by man from a chert nodule, core, or artifact. |
| Lithic artifact | Any artifact made of stone, but generally this term refers to an artifact made from chert, such as biface, projectile point, knife, or scarper. |
| Midden | Garbage dump or place where refuse was purposefully deposited. On native archaeological sites, predominantly village sites, middens are generally less than 20m in diameter and consist of concentrations of artifacts and refuse in a matrix of black organic soil. |

| | |
|---|---|
| Projectile Point | (see arrowhead)<br>Technically, arrowheads were hafted on arrow shafts fired from a bow, but projectile point is a more encompassing term to include points hafted on spears and thrown or thrust like a javelin. |
| Retouch | The process by which small flakes are removed from a lithic artifact, predominantly by means of pressure-flaking with a hand-held stylus such as the tip of an antler. This process is used to transform a biface into a projectile point or to straighten, sharpen, or otherwise modify the edge of a chert flake or artifact. |
| Scraper | Generally a chert flake that has been modified by deliberate retouch to create a scraping surface. Scrapers were frequently used to remove flesh from hides or to remove flesh and muscles from bone. |
| Site | Any location exhibiting use by man, either prehistorically or historically, and ranging from a single artifact to a large village or town. |
| Utilized flake | A flake of chert exhibiting wear patterns from use in a scraping function, but not otherwise modified by man (i.e., not retouched prior to use, as in the case of a scraper). Frequently, waste flakes from the manufacture of lithic artifacts were simply picked up, used to scrape a hide, bone, or piece of wood, and then discarded, but evidence for their use in such a function remains as a series of scars along a lateral edge where micro-flakes were broken off from such use. |

APPENDIX B
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